

Research Summary

Highway Safety Manual Training

Safety has become an area of increasing focus in all aspects of transportation planning, design, construction, and operations. Transportation legislations, such as the SAFETEA-LU Act (2005) and the FAST Act (2015), have promoted data-driven safety analysis in various programs.

The publication of the Highway Safety Manual (2010) and the Supplement (2014) have standardized data-driven safety methodology and developed associated user-friendly tools such as spreadsheets and ISATe (Enhanced Interchange Safety Analysis Toolbox). The demand for knowledge and experience in data-driven safety analysis has been increasing.

This report documents a project to produce data-driven safety training for MoDOT trainers. The project developed two training deliverables.

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The first was a full-day training for safety staff and engineers. This training covered the fundamentals of data-driven safety, rural multilane divided highways, urban/suburban 4-



leg signalized intersections, urban 4-lane freeway segments, and four sample applications: design exception, traffic impact study, design build, and safety programming. The second was a 15-minute video that presents an overview of data-driven safety and is suitable for staff at various levels, even those without formal safety training.

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Figure 1: Increased police presence leads to an increase in subjective safety (i.e., people feel safer)

A goal of this project is to produce flexible training material that can meet the training needs of various MoDOT districts and divisions.





Figure 2: During crash, airbag deployed properly to cushion impact

Project Information

PROJECT NAME: TR201908—Highway Safety Manual Training

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LEAD CONTRACTOR: University of Missouri-Columbia

PRINCIPAL INVESTIGATOR: Carlos Sun and Praveen Edara

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